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We Claim:

1.   A medical decision support system, comprising:

        a processor;

        a memory device;

        an input for acquiring gene expression data, said input associated with a first classifier/predictor module;

        an input for acquiring clinical information, said input associated with a second classifier/predictor module; and

        a program available to said processor comprising a combination algorithm.

2.   The system of claim 1, further comprising an output device.

3.   A method for support a medical decision on a computer system, comprising the steps of:

        (a)   classifying genetic expression information using a first classifier/predictor module to provide classified gene expression information;

        (b)   classifying clinical information into a second classifer/predictor module to provide classified clinical information; and

        (c)   combining said classified genetic information and said classified clinical information into a predicted outcome.

4.   The method of claim 3, wherein said steps (a) and (b) include at least one of an EFuNN process and a Bayesian process.

5.   A computer system to support a medical decision, comprising:

        a processor; and

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a memory device having classified gene expression information and classified clinical information stored thereon.

6.   The computer system of claim 5, further comprising a predicted outcome based on combined classified gene expression information and clinical information stored on said memory device.

7.   A method for extracting relationship rules between sets of genes and clinical variables common for patients of a group substantially as herein described.